

SEQUENCE LISTING

<110> Wang, Caili
Zhong, Pingyu
Wang, Xinwei

<120> ADAPTER-DIRECTED DISPLAY SYSTEMS

<130> 13403.0005NPUS00

<160> 24

<170> PatentIn version 3.1

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<213> Bacteriophage M13

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<212> PRT
<213> Bacteriophage M13

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His Ser Ala

<210> 3
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<212> DNA
<213> Bacteriophage M13

<400> 3

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recep
tor 2 domain and Myc domain

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120

cagctgcagg acgtcgagg ttgcgcggcc gcagaacaaa aactcatctc agaagaggat
180

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222

<210> 5
<211> 74
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic, comprising phage gene III leader sequence, GABAB
recep
tor 2 domain and Myc domain

<400> 5

Leu Val Val Pro Phe Tyr Ser His Ser Ala Thr Ser Arg Leu Glu Gly
1 5 10 15

Leu Gln Ser Glu Asn His Arg Leu Arg Met Lys Ile Thr Glu Leu Asp
20 25 30

Lys Asp Leu Glu Glu Val Thr Met Gln Leu Gln Asp Val Gly Gly Cys
35 40 45

Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Arg Ser Gly
50 55 60

Gly Gly Thr Val Glu Ser Cys Leu Ala Lys
65 70

<210> 6
<211> 56
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic, comprising phage gene III leader sequence, GABAB
recep
tor 2 domain and Myc domain

<400> 6

Thr Ser Arg Leu Glu Gly Leu Gln Ser Glu Asn His Arg Leu Arg Met
1 5 10 15

Lys Ile Thr Glu Leu Asp Lys Asp Leu Glu Glu Val Thr Met Gln Leu
20 25 30

Gln Asp Val Gly Gly Cys Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu
35 40 45

Glu Asp Leu Arg Ser Gly Gly
50 55

<210> 7
<211> 3093
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic, comprising ampicillin gene sequence, ColE1 repli
cation
origin, f1 replication origin, Plac promoter, GABAB recept
or 1 d
omain, histidine tag

<400> 7
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gcttccggct cgtatgttgt gtggaattgt gagcggataa caatttaccg gttctttaag
120

gaggaattaa aaaatgaaat acctattgcc tacggcagcc gctggattgt tattactcg
180

ggcccagccg gccatggcgg ccctgcaggc ctctagagcg gccgctggag gtgaggagaa
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gtcccggctg ttggagaagg agaaccgtga actggaaaag atcattgctg agaaagagga
300

gctgtctct gaactgcgcc atcaactcca gtctgttagga ggtttagat cttatccata
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420

ccaattcgcc ctatagttag tcgtattaca attcactggc cgtcggtta caacgtcgtg
480

actgggaaaa ccctggcggtt acccaactta atcgcccttgc agcacatccc ctttcgcca
540

gctggcgtaa tagcgaagag gcccgacccg atcgcccttc ccaacagttg cgccagcctga
600

atggcgaatg ggacgcgccc tgttagcggcg cattaagcgc ggcgggtgtg gtggttacgc
660

gcagcgtgac cgctacactt gccagcgccc tagcgccgc tccttcgct ttcttcctt
720

cctttctcgc cacgttcgccc ggcttcccc gtcaagctct aaatcgaaaa ctcccttag
780

ggttccgatt tagtgctta cggcacctcg accccaaaaa acttgattag ggtgatggtt
840

cacgtatgg gccatcgccc tgatagacgg ttttcgccc tttgacgttg gagtccacgt
900

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960

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1020

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1080

tccggaaat gtgcgaaa cccctattt tttattttc taaatacatt caaatatgt
1140

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1200

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1320

agtgggttac atcgaactgg atctcaacag cggtaagatc cttgagagtt ttcgccccga
1380

agaacgtttt ccaatgatga gcactttaa agttctgcta tgtggcgccg tattatcccg
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1560

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1680

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1740

ttagtcaatg gcaacaacgt tgccaaact attaactggc gaactactta ctctagcttc
1800

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1920

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2460agtggctgct gccagtggcg ataagtcgtg tcttaccggg ttggactcaa gacgatagtt
2520accggataag gcgcagcggt cgggctgaac ggggggttcg tgcacacagc ccagcttgg
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2640tccccgaagg agaaaggcgg acaggtatcc ggtaagcggc agggtcggaa caggagagcg
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<210> 8

<211> 192

<212> DNA

<213> Bacteriophage M13

<400> 8

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ttagcaaaac 180

gatcgta 192

ct

<210> 9

<211> 64

<212> PRT

<213> Bacteriophage M13

<220>

<221> MISC_FEATURE

<222> (11)..(11)

<223> Xaa = stop codon

<400> 9

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5

10

15

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20 25 30

Gly Gly Gly Thr Val Glu Ser Cys Leu Ala Lys Pro His Thr Glu Asn
35 40 45

Ser Phe Thr Asn Val Trp Lys Asp Asp Lys Thr Leu Asp Arg Tyr Ala
50 55 60

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<210> 10
<211> 2962
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic, comprising ampicillin gene sequence, ColE1 replication
origin, f1 replication origin, Plac promoter, influenza virus he
magglutinin tag

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gcttccggct cgtatgttgt gtggaaattgt gagcggataa caatttaccc gttcttttaa
120

cttttagtaag gaggaattaa aaaatgaaat acctattgcc tacggcagcc gctggattgt
180

tattactcgc ggcccagccg gccatggcgg ccctgcagggc ctctagagcg gcccgttacc
240

cgtacgacgt tccggactac gcaggtggct gctgataagt cgacctcgac caattcgccc
300

tatagtgagt cgttattacaa ttcactggcc gtcgtttac aacgtcgtga ctggggaaaac
360

cctggcgtaa cccaaacttaa tcgccttgca gcacatcccc cttdcgccag ctggcgtaat
420

agcgaagagg cccgcaccca tcgccc ttcc caacagttgc gcagcctgaa tggcgaatgg
480

gacgcgcctt gtagcggcgc attaagcgcg gcgggtgtgg tggttacgctg cagcgtgacc
540

gctacacttg ccagcgcctt agcgcccgct ccttcgctt tcttccttc ctttctcgcc
600

acgttcgcccgc gctttcccg tcaagctcta aatcgggggc tccctttagg gttccgattt
660

agtgcatttac ggcacctcga ccccaaaaaa cttgattttagg gtgtatggttc acgttagtggg
720

ccatcgccct gatagacggt ttttcgccc ttgacgttgg agtccacgtt ctttaatagt
780

ggactcttgt tccaaactgg aacaacactc aaccctatct cggtctattc ttttgattta
840

taagggattt tgccgatttc ggcctattgg ttaaaaaatg agctgattta acaaaaattt
900

aacgcgaatt ttaacaaaat attaacgctt acaattttagg tggcactttt cggggaaatg
960

tgcgcggaac ccctatttgt ttattttct aaatacattc aaatatgtat ccgctcatga
1020

gacaataacc ctgataaaatg cttcaataat attgaaaaag gaagagtatg agtattcaac
1080

atttccgtgt cgcccttatt cccttttg cggcattttg ctttcctgtt tttgctcacc
1140

cagaaacgct ggtgaaagta aaagatgctg aagatcagtt gggtgacga gtgggttaca
1200

tcgaaactgga tctcaacagc ggtaagatcc ttgagagttt tcgccccgaa gaacgtttc
1260

caatgatgag cactttaaa gttctgctat gtggcgccgt attatccgt attgacgccc
1320

ggcaagagca actcggtcgc cgatacact attctcagaa tgacttggtt gagtactcac
1380

cagtcacaga aaagcatctt acggatggca tgacagtaag agaattatgc agtgctgcca
1440

taaccatgag tgataaacact gcggccaact tacttctgac aacgatcgga ggaccgaagg
1500

agctaaccgc tttttgcac aacatggggg atcatgtaac tcgccttgat cgttggaaac
1560

cggagctgaa tgaagccata ccaaacgacg agcgtgacac cacgatgcct gtagcaatgg
1620

caacaacgtt gcgcaaacta ttaactggcg aactacttac tctagttcc cgccaacaat
1680

taatagactg gatggaggcg gataaagttg caggaccact tctgcgctcg gcccttccgg
1740

ctggctggtt tattgctgat aaatctggag ccggtgagcg tgggtctcgc ggtatcattg
1800

cagcactggg gccagatggt aagccctccc gtatcgtagt tatctacacg acggggagtc
1860

aggcaactat ggatgaacga aatagacaga tcgctgagat aggtgcctca ctgattaagc
1920

atggtaact gtcagaccaa gtttactcat atatacttta gattgattta aaacttcatt
1980

ttaatttaa aaggatctag gtgaagatcc ttttgataa tctcatgacc aaaatccctt
2040

aacgtgagtt ttcttccac tgagcgtcag accccgtaga aaagatcaaa ggatcttctt
2100

gagatcctt tttctgcgc gtaatctgct gcttgcaaac aaaaaaacca ccgctaccag
2160

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2220

gcagagcgca gataccaaat actgtccttc tagttagcc gtagtttaggc caccactca
2280

agaactctgt agcaccgcct acatacctcg ctctgctaat cctgttacca gtggctgctg
2340

ccagtgccga taagtcgtgt cttaccgggt tggactcaag acgatagttt ccggataagg
2400

cgcagcggtc gggctgaacg gggggttcgt gcacacagcc cagcttgag cgaacgaccc
2460

acaccgaact gagataccctt cagcgtgagc tatgagaaag cgccacgctt cccgaaggga
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2580

ttccaggggg aaacgcctgg tatctttata gtcctgtcgg gtttcgccac ctctgacttg
2640

agcgtcgatt tttgtgatgc tcgtcagggg ggcggagcct atggaaaaac gccagcaacg
2700

cggcctttt acggttcctg gcctttgtc ggcctttgc tcacatgttc tttcctgcgt
2760

tatccccctga ttctgtggat aaccgtattt ccgcctttga gtgagctgat accgctcgcc
2820

gcagccgaac gaccgagcgc agcgagtcag tgagcgagga agcgaaagag cgcccaatac
2880

gcaaaccgcc tctccccgcg cgttggccga ttcattaatg cagctggcac gacaggttc
2940

cgcactggaa agcgggcagt ga
2962

<210> 11

<211> 903

<212> DNA

<213> Bacteriophage M13

<400> 11

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120

cagctgcagg acgtcggagg ttgcgcggcc gcagaacaaa aactgatctc agaagaggat

180

ctgacgcgtg ctggcggcgg ctctgggtggt ggttctggtg gcggctctga gggtggcggc
240

tctgagggtg gcggttctga gggtggcggc tctgagggtg gcggttccgg tggcggctcc
300

ggttccggtg atttgatta tgaaaaatg gcaaacgcta ataagggggc tatgaccgaa
360

aatgccgatg aaaacgcgct acagtctgac gctaaaggca aacttgcattt tgtcgctact
420

gattacggtg ctgctatcga tggtttcatt ggtgacgttt ccggccttgc taatggtaat
480

ggtgctactg gtgatttgc tggctctaatttccaaatgg ctcaagtcgg tgacggtgat
540

aattcacctt taatgaataa tttccgtcaa tatttacctt ccctccctca atcgggtgaa
600

tgtcgccctt ttgtctttgg cgctggtaaa ccatatgaat tttctattga ttgtgacaaa
660

ataaaacttat tccgtggtgt ctgtcggttt ctttatatg ttgccacctt tatgtatgta
720

ttttctacgt ttgctaacat actgcgtaat aaggagtctt aataaggcgc gccacaattt
780

cacagtaagg aggttaata aatgaaaaag acagctatttgcgattgcagt ggcactggct
840

ggtttcgcta ccgtacgcga ggctagatct ggaggcggta ctgtgaaag ttgttagca
900

aaa

903

<210> 12

<211> 287

<212> PRT

<213> Bacteriophage M13

<400> 12

Leu Val Val Pro Phe Tyr Ser His Ser Ala Thr Ser Arg Leu Glu Gly
 1 5 10 15

Leu Gln Ser Glu Asn His Arg Leu Arg Met Lys Ile Thr Glu Leu Asp
 20 25 30

Lys Asp Leu Glu Glu Val Thr Met Gln Leu Gln Asp Val Gly Gly Cys
 35 40 45

Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Thr Arg Ala
 50 55 60

Gly Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Glu Gly Gly Gly
 65 70 75 80

Ser Glu Gly Gly Ser Glu Gly Gly Ser Glu Gly Gly Ser Gly Ser
 85 90 95

Gly Gly Gly Ser Gly Ser Gly Asp Phe Asp Tyr Glu Lys Met Ala Asn
 100 105 110

Ala Asn Lys Gly Ala Met Thr Glu Asn Ala Asp Glu Asn Ala Leu Gln
 115 120 125

Ser Asp Ala Lys Gly Lys Leu Asp Ser Val Ala Thr Asp Tyr Gly Ala
 130 135 140

Ala Ile Asp Gly Phe Ile Gly Asp Val Ser Gly Leu Ala Asn Gly Asn
 145 150 155 160

Gly Ala Thr Gly Asp Phe Ala Gly Ser Asn Ser Gln Met Ala Gln Val
 165 170 175

Gly Asp Gly Asp Asn Ser Pro Leu Met Asn Asn Phe Arg Gln Tyr Leu
 180 185 190

Pro Ser Leu Pro Gln Ser Val Glu Cys Arg Pro Phe Val Phe Gly Ala
 195 200 205

Gly Lys Pro Tyr Glu Phe Ser Ile Asp Cys Asp Lys Ile Asn Leu Phe
 210 215 220

Arg Gly Val Phe Ala Phe Leu Leu Tyr Val Ala Thr Phe Met Tyr Val
 225 230 235 240

Phe Ser Thr Phe Ala Asn Ile Leu Arg Asn Lys Glu Ser Met Lys Lys
 245 250 255

Thr Ala Ile Ala Ile Ala Val Ala Leu Ala Gly Phe Ala Thr Val Ala
 260 265 270

Gln Ala Arg Ser Gly Gly Thr Val Glu Ser Cys Leu Ala Lys
 275 280 285

<210> 13

<211> 272

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic, comprising lac promoter, phage gene VIII leader
 sequence, influenza virus hemagglutinin tag, phage gene III sequence

<400> 13

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tgaaaaaagtc ttagtcctc aaagcctccg tagccgttgc taccctcgaa ccgatgctaa
 120

gcttcgcttc tagagcggcc gcttatccat acgacgtacc agactacgca ggaggtcatc
 180

accatcatca ccattagaga tctggaggcg gtactgttga aagttgttta gcaaaagcta
 240

acatactgcg taataaggag tcttaagtgc ac
272

<210> 14
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic, comprising influenza virus hemagglutinin tag, Histidin e tag, phage gene III sequence

<220>
<221> MISC_FEATURE
<222> (46)..(69)
<223> Xaa = stop codon

<400> 14

Met Lys Lys Ser Leu Val Leu Lys Ala Ser Val Ala Val Ala Thr Leu
1 5 10 15

Val Pro Met Leu Ser Phe Ala Ser Arg Ala Ala Ala Tyr Pro Tyr Asp
20 25 30

Val Pro Asp Tyr Ala Gly Gly His His His His His Xaa Arg Ser
35 40 45

Gly Gly Gly Thr Val Glu Ser Cys Leu Ala Lys Ala Asn Ile Leu Arg
50 55 60

Asn Lys Glu Ser Xaa
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<210> 15
<211> 146
<212> DNA
<213> Homo Sapien

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gaaaagatca ttgctgagaa agaggagcgt gtctctgaac tgccatca actccagtct
120

gtaggagggtt gttaataggg cgcc
146

<210> 16
<211> 44
<212> PRT
<213> Homo Sapien

<400> 16

Ser Arg Gly Gly Gly Glu Glu Lys Ser Arg Leu Leu Glu Lys Glu
1 5 10 15

Asn Arg Glu Leu Glu Lys Ile Ile Ala Glu Lys Glu Glu Arg Val Ser
20 25 30

Glu Leu Arg His Gln Leu Gln Ser Val Gly Gly Cys
35 40

<210> 17
<211> 140
<212> DNA
<213> Homo Sapien

<400> 17

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60

cgaatgaaga tcacagagct ggataaagac ttggaagagg tcaccatgca gctgcaggac
120

gtcggagggtt gcgcggccgc
140

<210> 18
<211> 47

<212> PRT

<213> Homo Sapien

<400> 18

Ser Arg Gly Gly Gly Gly Thr Ser Arg Leu Glu Gly Leu Gln Ser Glu
1 5 10 15

Asn His Arg Leu Arg Met Lys Ile Thr Glu Leu Asp Lys Asp Leu Glu
20 25 30

Glu Val Thr Met Gln Leu Gln Asp Val Gly Gly Cys Ala Ala Ala
35 40 45

<210> 19

<211> 32

<212> DNA

<213> Bacteriophage M13

<400> 19

ttagtggtt cctttctatt ctcactccgc tg
32

<210> 20

<211> 32

<212> DNA

<213> Bacteriophage M13

<400> 20

tagaaaggta ccactaaagg aattgcgaat aa
32

<210> 21

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Primer

<400> 21

ggaattgtga gcggataaca atttaccggc cacacaggaa acagctatga ccatg
55

<210> 22
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Primer

<400> 22
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55

<210> 23
<211> 3057
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic, comprising Ampicillin gene sequence, ColE1 replication
origin, f1 replication origin, lac promoter, GABAB receptor 1 do
main, influenza virus hemagglutinin tag

<400> 23
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60

gcttccggct cgtatgtgt gtgaaattgt gagcggataa caatttacccg gttcttaag
120

gaggaattaa aaaatgaaaa agtcttagt cctcaaagcc tccgtagccg ttgctaccct
180

cggtccgatg ctaagcttcg ctggtgagga aaagtcccgatg ctgctggaga aagagaaccg
240

tgaactggaa aagatcatttgc ctgagaaaaga ggagcgtgtt tctgaactgc gccatcaact
300

gcagtctgtat ggccgttgca cgcgttctag agcggccgct taccctgtacg acgttccggat
360

ctacgcattgtat taagtcgacc tcgaccaatt cgccctatag tgagtcgtat tacaatttac
420

tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa cttaatcgcc
480

ttgcagcaca tcccctttc gccagctggc gtaatagcga agaggccgc accgatcgcc
540

cttccaaca gttgcgcagc ctgaatggcg aatggacgc gccctgttagc ggcgattaa
600

gcgcggcggg tgtggtggtt acgcgcagcg tgaccgctac acttgccagc gccctagcgc
660

ccgctcctt cgcttcttc cttccttgc tcgccacgtt cgccggctt cccgtcaag
720

ctctaaatcg ggggctccct ttagggttcc gathtagtgc tttacggcac ctgcacccca
780

aaaaacttga ttagggtgat ggttcacgta gtggccatc gccctgatag acggtttttc
840

gcccttgac gttggagtcc acgttctta atagtggact cttgttccaa actggaacaa
900

cactcaaccc tatctcggtc tattcttttgc atttataagg gatttgccc atttcggcct
960

attggtaaaa aaatgagctg atttaacaaa aatttaacgc gaatttaac aaaatattaa
1020

cgcttacaat ttaggtggca ctttcgggg aaatgtgcgc ggaaccccta tttgtttatt
1080

tttctaaata cattcaaata tgtatccgct catgagacaa taaccctgat aaatgcttca
1140

ataatattga aaaaggaaga gtatgagttat tcaacatttc cgtgtcgccc ttattccctt
1200

tttgcggca tttgccttc ctgttttgc tcaccagaa acgctggtga aagtaaaaaga
1260

tgctgaagat cagttgggtg cacgagtggg ttacatcgaa ctggatctca acagcggtaa
1320

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